

Organelle Shaping

SPG3A *ATL1*
 SPG58 *KIF1C*
 SPG72 *REEP2*
 SPG4 *SPAST*
 SPG12 *RTN2*
 SPG17 *BSCL2*
 SPG31 *REEP1*
 SPG33 *ZFYVE27*
 SPG20 *KIAA0610*
 SPG46 *GBA2*
 SPG57 *TFG*
 SPG61 *ARL6IP1*
 SPG67 *PGAP1*
 SPG69 *RAB3GAP2*

Microtubule Dynamics

SPG30 *KIF1A*
 SPG72 *REEP2*
 SPG4 *SPAST*
 SPG10 *KIF5A*
 SPG31 *REEP1*

Signaling

SPG3A *ATL1*
 SPG18/37 *ERLIN2*
 SPG4 *SPAST*
 SPG6 *NIPA1*
 SPG42 *SLC33A1*
 SPG20 *KIAA0610*
 SPG39 *PNPLA6*

Endo-membrane Trafficking

SPG3A *ATL1*
 SPG4 *SPAST*
 SPG6 *NIPA1*
 SPG8 *KIAA019*
 SPG10 *KIF5A*
 SPG80 *UBAP1*
 SPG11 *KIAA1840*
 SPG15 *ZFYVE26*
 SPG20 *KIAA0610*
 SPG21 *ACP33*
 SPG47 *AP4B1*
 SPG48 *AP5Z1*
 SPG50 *AP4M1*
 SPG51 *AP4E1*
 SPG52 *AP4S1*
 SPG53 *VPS37A*
 SPG57 *TFG*
 SPG59 *USP8*
 SPG78 *ATP13A2*

Degradation Pathways

SPG18/37 *ERLIN2*
 SPG80 *UBAP1*
 SPG11 *KIAA1840*
 SPG15 *ZFYVE26*
 SPG23 *DSTYK*
 SPG48 *AP5Z1*
 SPG49 *TECPR2*
 SPG59 *USP8*
 SPG60 *WDR48*
 SPG62 *ERLIN1*
 SPG76 *CAPN1*
 SPG79 *UCHL1*

Mitochondrial Function

SPG9 *ALDH18A1*
 SPG7 *SPG7*
 SPG13 *HSPD1*
 SPG31 *REEP1*
 SPG20 *KIAA0610*
 SPG28 *DDHD1*
 SPG43 *C19orf12*
 SPG55 *C12orf65*
 SPG74 *IBA57*
 SPG77 *FARS*
 SPG78 *ATP13A2*
 SPG83* *HPDL*

Metabolism/ Hormones

Amino Acid Metabolism
 SPG9 *ALDH18A1*
 Nucleotide Metabolism
 SPG63 *AMPD2*
 SPG64 *ENTPD1*
 SPG(45/65) *NT5C2*
 RNA Related
 SPG70 *MARS*
 SPG71 *ZFR*
 Hormones
 SPG22 *SLC16A2*
 SPG66 *ARSI*

Transport

SPG30 *KIF1A*
 SPG58 *KIF1C*
 SPG4 *SPAST*
 SPG10 *KIF5A*
 SPG67 *PGAP1*

Lipid Metabolism

SPG18/37 *ERLIN2*
 SPG17 *BSCL2*
 SPG42 *SLC33A1*
 SPG73 *CYTEC*
 SPG5 *CYP7B1*
 SPG11 *KIAA1840*
 SPG26 *B4GALNT1*
 SPG28 *DDHD1*
 SPG35 *FA2H*
 SPG39 *PNPLA6*
 SPG46 *GBA2*
 SPG54 *DDHD2*
 SPG56 *CYP2U1*
 SPG62 *ERLIN1*
 SPG81 *EPT1*
 SPG82 *PCYT2*
 No SPG *ABHD16A*

Myelination

SPG35 *FA2H*
 SPG39 *PNPLA6*
 SPG44 *GJC2/ CX47*
 SPG46 *GBA2*
 SPG75 *MAG*
 SPG1 *L1CAM*
 SPG2 *PLP1*

Development

SPG3A *ATL1*
 SPG4 *SPAST*
 SPG6 *NIPA1*
 SPG8 *KIAA0196*
 SPG10 *KIF5A*
 SPG33 *ZFYVE27*
 SPG20 *KIAA0610*
 SPG59 *USP8*
 SPG68 *FLRT1*
 SPG1 *L1CAM*
 SPG22 *SLC16A2*